PATENT

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE.

In re Application of Customer Number: 46320

John HIND, et al. Confirmation Number: 5123

Group Art Unit: 2165

Application No.: 10/047,860

Filed: January 15, 2002 : Examiner: N. Abel-Jalil

For: EDGE DEPLOYED DATABASE PROXY DRIVER

REPLY BRIEF

Mail Stop Appeal Brief - Patents Commissioner For Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

This Reply Brief is submitted under 37 C.F.R. § 41.41 in response to the EXAMINER'S ANSWER dated January 24, 2007.

The Examiner's response to Appellants' arguments submitted in the Appeal Brief of November 7, 2006, raises additional issues and underscores the factual and legal shortcomings in the Examiner's rejections. In response, Appellants rely upon the arguments presented in the Appeal Brief of November 7, 2006, and the arguments set forth below.

On pages 7 and 8 of the Appeal Brief, Appellants argued that the Examiner failed to establish that '332 provisional application supports the subject matter taught by McHenry, which

was relied upon by the Examiner in rejecting claims 1-2, 4-7, 9-10, 13-14, and 16-17 under 35 U.S.C. § 102 for anticipation based upon McHenry.

Specifically, Appellants noted that the Examiner relied on paragraph [0040] of McHenry, which refers to Fig. 4 of McHenry, yet a Fig. 4 does not exist in the '332 provisional application. Moreover, the Examiner referred to paragraphs [0013], [0030], [0031], and [0032], but upon reviewing McHenry, Appellants were unable to determine exactly where all the teachings found in these paragraphs are supported by the '332 provisional application.

The Examiner's response to these arguments is found on pages 6 and 7 of the Examiner's Answer and reproduced, in part, below:

In response to Appellant's remarks that "Figure 4 applied in the rejection above does not exist in the '332 provisional application' is fully acknowledged but not deemed to be persuasive. The text support for Figure 4 can still be found in Provisional Application 60340,332 paragraph Figure 4 was used to depict use of a proxy to provide a generic application communication/access by connectivity to a database.

Subject matter of paragraph 0013 apolled in the rejection above can be found in '332.

paragraph 0013, referenced to teach "caching task".

At the outset, with regard to Appellants' prior arguments with regard to Fig. 4 of McHenry, Appellants note that although the Examiner asserts that text support can be found in the '332 provisional application, the Examiner neglects to identify where, exactly, that text support can be found.

The Examiner relied upon paragraph [0013] of McHenry to teach the limitations of claims 4, 9, and 16. Claim 4 recites that "said auxiliary task is caching," and claims 9 and 16

recite "said performing step comprises performing a database caching task." The "auxiliary task" recited in claim 4 refers to the following limitation in claim 1:

said database proxy driver having a configuration for invoking at least one auxiliary task in addition to providing access to said database server through said first exposed interface of said universal database connectivity driver.

The "performing step" recited in claims 9 and 16 refers to the following limitation in claims 6 and 13:

performing at least one auxiliary task in addition to forwarding said database connectivity request.

As noted above, the Examiner asserts that the subject matter of paragraph [0013] of McHenry, which was relied upon in the rejection, is supported by paragraph [0013] of the '332 application, which for ease of reference is reproduced below:

[0013] An advantage of the present invention is that the full benefits of reverse proxy caches can be realized with the quality of service available from forward proxy caches relative to defined network domains. Such domains, which can include corporate enterprises, can realize a substantial cost and productivity benefit from the deployment of multi-proxy caches in accordance with the present invention.

Appellants are unclear as to how this paragraph [0013] of the '332 application supports the rejection of the above-identified claimed limitations. This passage is completely silent as to performing an auxiliary task in the manner recited in claims 4, 9, and 16. Thus, Appellants maintain that the Examiner has failed to establish that '332 provisional application supports the subject matter taught by McHenry, which the Examiner has relied upon to identically disclose the claimed limitations.

The Examiner relied upon paragraph [0030] of McHenry to teach the claimed "a universal database connectivity driver having a first exposed interface through which access to a database server can be provided," as recited in claim 1, and "receiving a database connectivity request through a corresponding first exposed database connectivity method from a database driven application," as recited in claims 6 and 13. As to paragraph [0030], the Examiner asserted the following on page 6 of the Examiner's Answer:

Subject matter of paragraph 0030 applied in the rejection above can be found in '332 paragraph 0028, an over all description of McHenry's Figure 1, showing request/transfer connectivity between interfaced application and database, referenced to teach "request from database application through an interface".

As noted above, the Examiner asserts that the subject matter of paragraph [0030] of McHenry, which was relied upon in the rejection, is supported by paragraph [0028] of the '332 provisional application, which for ease of reference is reproduced below:

[0028] The content policy for a multi-proxy cache describes the source and scope of content to be cached and the cache policy that is to be applied. Preferably, the policy defines, against logical storage segments of the multi-policy cache, a distinct set of content available from a defined set of origin servers that can be cached in a cache segment and a corresponding cache persistence algorithm. In a preferred embodiment of the present invention, the cache segments may be allocated to store content from different departments of a corporation, such as engineering, customer support, and marketing. Thus, the content policy can specify that a discrete, defined portion of the engineering content from an engineering origin server will be persistently held in one segment of specified size as part of the reverse proxy store of the multi-proxy cache. The content policy can also specify that any content within a set of marketing content from a corporate origin server can be fetched into a particular segment of the reverse proxy store, subject to lowest QoS replacement if the segment fills to a defined size.

Upon reviewing this passage, Appellants are unclear as to what features disclosed by paragraph [0028] of the '332 provisional application correspond to: (i) first exposed interface, (ii) database connectivity request, (iii) database driven application, (iv) database server, and (v) universal database connectivity driver. In this regard, Appellants note that the Examiner has failed to clearly designate the teachings in the '332 provisional application being relied upon the statement

of the rejection. In this regard, the Examiner's rejection under 35 U.S.C. § 102 also fails to comply with 37 C.F.R. § 1.104(c), which reads:

In rejecting claims for want of novelty or for obviousness, the examiner must cite the best references at his or her command. When a reference is complex or shows or describes inventions other than that claimed by the applicant, the particular part relied on must be designated as nearly as practicable. The pertinence of each reference, if not apparent, must be clearly explained and each rejected claim specified.

Appellants are unable to accurately evaluate whether or not paragraph [0028] of the '332 provisional application supports the subject matter taught by McHenry, which the Examiner has relied upon to identically disclose the claimed limitations, since Appellants are unclear as to what specific features are being relied upon by the Examiner.

The Examiner relied upon paragraph [0031] of McHenry to teach the claimed "an application analyzer configured to tune operation of said auxiliary task based upon said meta-information," as recited in claim 5, and "modifying operation of said auxiliary task based upon an analysis of said collected meta-data," as recited in claims 10 and 17. As to paragraph [0031], the Examiner asserted the following on page 6 of the Examiner's Answer:

Subject matter of paragraph 0031 applied in the rejection above can be found in '332 paragraph 0030, referenced to teach "modifying collected meta-data".

As noted above, the Examiner asserts that the subject matter of paragraph [0031] of McHenry, which was relied upon in the rejection, is supported by paragraph [0030] of the '332 provisional application, which for ease of reference is reproduced below:

[0030] The content director utilizes the edge server list in conjunction with meta-content data to produce object/action rule lists that are then distributed to the edge servers for use by the agent applications. The meta-content is generated by the operation of a spider process that crawls through the content hosted by the origin servers. The URL path for the different elements of content found by the spider process, as well as a set of defined element attributes, are collected and stored as the meta-content data. The origin server name and found URL paths provide a basis for determining content source and scope. The attributes recorded include content type (Mime-

type), file size, modification and other dates, location, ownership, group membership and access permissions, and other similar content element qualifiers. Preferably, the meta-content is periodically evaluated against the edge server list by the content director to determine updates to the object/action lists distributed to the agent applications. The updates may be scheduled by the content director to ensure that the multi-proxy caches remain current. Dynamic updates may also be generated when, for example, a content element held by an origin server has been modified and, consistent with the relevant content policies, the modified content is to be immediately reflected in the affected multi-proxy caches.

Upon reviewing this passage, Appellants are unclear as to what feature within this passage refers to the claimed "auxiliary task," which is tuned/modified in response to meta information/data. Claims 4, 9, and 16, which were discussed above, also refer to the claimed "auxiliary task." However, upon reviewing the paragraph [0013] of the '332 provisional application, and paragraph [0030] of the '332 application, Appellants are unable to discern a common feature that would be considered by one having ordinary skill in the art as comparable to the claimed "auxiliary task."

The Examiner relied upon paragraph [0032] of McHenry to teach the following limitation recited in claims 6 and 13:

forwarding said database connectivity request to an underlying database connectivity driver through a corresponding second exposed method having a method prototype which matches a method prototype of said first exposed database connectivity method.

As to paragraph [0032] of McHenry, the Examiner asserted the following on page 7 of the Examiner's Answer:

Subject matter of paragraph 0032 applied in the rejection above can be found in '332 paragraph 0026, referenced to teach "database connectivity interface matches".

As noted above, the Examiner asserts that the subject matter of paragraph [0032] of McHenry, which was relied upon in the rejection, is supported by paragraph [0026] of the '332 provisional application, which for ease of reference is reproduced below:

[0026] In accordance with the present invention, an edge server within the connection path of the content response executes an agent application that manages the contents of a multi-proxy cache hosted by the edge server. Multiple instances of the edge server, agent application, and multi-proxy cache may be deployed at different locations as needed to serve different sets of clients. In general, the deployment of edge servers corresponds to various locales of a content distribution network domain. In one application of the present invention, edge servers may be deployed at the different geographically distributed offices or office complexes of a national or multi-antional enterprise. Each agent application manages content within the associated multi-proxy cache based on information provided to the agent application from a global content director executed by a network connected server. For the preferred embodiments of the present invention, the information provided to each agent application is tailored to the specific content access requirements of the clients of the multi-proxy cache.

Upon reviewing this paragraph, Appellants are entirely unclear where this passage supports the teaching of the claimed "a corresponding second exposed method having a method prototype which matches a method prototype of said first exposed database connectivity method." This paragraph appears to be completely silent in this regard. Thus, Appellants maintain that the Examiner has failed to establish that '332 provisional application supports the subject matter taught by McHenry, which the Examiner has relied upon to identically disclose the claimed limitations.

On pages 8-10 of the Appeal Brief, Appellants noted that on page 2 of the Fourth Office Action, the Examiner asserted the following with regard to claims 1 and 13:

Claims I, and I3, recite "for" (i.e. for invoking.... For providing... for causing) constitute intended use of the claimed invention. Claims must result in a structural difference between the claimed invention and the prior art in order to be patentable, therefore, recitation following the "for" carry no patentable weight. Claims should be amended to recite more direct positive language such as "for", "the", "of", "which", or "invoking".

Thus, in the Fourth Office Action, the Examiner did not give any patentable weight to these terms. Although the Examiner did not directly address Appellants' arguments in the Examiner's Answer, the Examiner did not repeat the above-reproduced assertion in the Examiner's Answer.

Despite the Examiner not asserting that these features aren't being given patentable weight, Appellants note that the Examiner's statement of the rejection in the Examiner's Answer is essentially identical to the statement of the rejection in the Fourth Office Action. As such, Appellants are unclear as to whether or not the Examiner is now giving patentable weight to those claimed features or whether or not the Examiner is still failing to give patentable weight to those claimed features.

On pages 11 and 12 of the Appeal Brief, Appellants presented the following arguments. In the Fourth Office Action, the Examiner has continued the theme present in the prior Office Actions of neither clearly designating the teachings in applied prior art being relied upon nor clearly explaining the pertinence of applied prior, as required by 37 C.F.R. § 1.104(c).

With regard to claim 1, the Examiner's analysis found on page 5 of the Fourth Office Action is as follows:

[claim language reproduced] (See Figure 1, and page 3, paragraph 0030);
[claim language reproduced] (See Figure 1, shows the network distribution, and see
Figure 3, shows edge server caching and storing various database multi proxy agent); and
[claim language reproduced] (See page 4, paragraph 0040).

As readily evident from the "analysis" reproduced above, the Examiner has failed to specifically identify within McHenry any of the claimed limitations. Claim 1 recites, in part, the following

features: (i) universal database connectivity driver; (ii) database server; (iii) database proxy driver; and (iv) database driven application. For ease of reference, referring to Fig. 1 of Appellants' disclosure, these features are illustrated as follows: (i) universal database connectivity driver (e.g., Data Access Middleware 180); (ii) database server (e.g., Back End DB 190); (iii) database proxy driver (e.g., Data Access Middleware Proxy 170); and (iv) database driven application (e.g., Application 160). Upon reviewing Figures 1 and 3 of McHenry, which were specifically cited by the Examiner, Appellants note that at least twenty different elements are shown, yet the Examiner's analysis does not indicate what elements taught by these figures correspond to the claimed elements.

As another example, claim 1 further recites a first exposed interface and a second exposed interface, which conforms to the first exposed interface. These elements were purportedly disclosed by Figure 1, Figure 3 and paragraph [0030], but these figures and the cited passage do not discuss interfaces at all. As such, Appellants are entirely unclear as to how McHenry discloses these elements.

The Examiner's analysis as to Figure 1, Figure 3, and paragraph [0030] of McHenry is found on pages 7 and 8 of the Examiner's Answer. At the outset, Appellants note that the Examiner has failed to clearly identify all of the following claimed features within McHenry: (i) universal database connectivity driver; (ii) database server; (iii) database proxy driver; and (iv) database driven application.

As best can be understood, the claimed database server is disclosed by origin servers 12₁

in Figure 1. However, in the last full paragraph on page 7 of the Examiner's Answer, the

Examiner asserts the following:

Furthermore, as shown in Figure 3 of McHenry, the edge server 22 mitigates requests/transfers between clients 16/18 through one interface (i.e. first exposed interface) as well as connectivity to the origin servers on the Internet through another interface (i.e. second exposed).

interface) both depicted by two-way arrow indicating an interface.

Thus, the Examiner is relying upon "the edge server 22" to teach both the first exposed interface

and the second exposed interface. Claim 1, however, recites that the "universal database

connectivity driver having a first exposed interface" and "said database proxy driver having a

second exposed interface which conforms with said first exposed interface." Appellants,

therefore, have recited two separate features (i.e., universal database connectivity driver and

database proxy driver), yet the Examiner appears to be relying upon a single feature (i.e., edge

server 22) within McHenry to teach both features.

Although Fig. 3 of McHenry shows the edge server 22 separated out into separate

elements, only the "request/transfer server 64" is disclosed as having the Examiner's alleged first

and second exposed interfaces (i.e., "depicted by two-way arrow indicating an interface," as

asserted by the Examiner). Thus, the Examiner is still relying upon a single feature to teach both

the claimed universal database connectivity driver and database proxy driver.

In the first full paragraph on page 8, the Examiner asserted the following:

It is of equivalent functionality; and in order to operate the send/receive of McHenry's edge server's that both sides of the server's communication interfaces must conform to effect

communication. (emphasis added)

At the outset, Appellants' note the Examiner comment regarding "equivalent functionality." The factual determination of anticipation under 35 U.S.C. § 102 requires the identical disclosure, either explicitly or inherently, of each element of a claimed invention in a single reference. The disclosure of an "equivalent" feature does not correspond to the disclosure of an identical feature within the meaning of 35 U.S.C. § 102.

Moreover, Appellants note that by asserting that "both sides of the server's communication interfaces must conform to effect communication," the Examiner is employing an inherency argument. However, the Examiner's reliance upon the doctrine of inherency to disclose that the "second exposed interface which conforms with said first exposed interface" is misplaced. Inherency may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient to establish inherency.² To establish inherency, the extrinsic evidence must make clear that the missing function must necessarily be present in the thing described in the reference, and that the necessity of the feature's presence would be so recognized by persons of ordinary skill.³ Furthermore, reference is made to ex parte Schricker, 4 in which the Honorable Board of Patent Appeals and Interferences stated the following:

However, when an examiner relies on inherency, it is incumbent on the examiner to point to the "page and line" of the prior art which justifies an inherency theory. <u>Compare, In re Rijckaert</u>, 9 F.3d 1531, 1533, 28 USPQ2d 1955, 1957 (Fed. Cir. 1993) (when the PTO asserts that there is an explicit or implicit teaching or suggestion in the prior art, it must indicate where such a teaching or

¹ In re Rijckaert, 9 F.3d 1531, 28 USPQ2d 1955 (Fed. Cir. 1993); <u>Lindermann Maschinenfabrik GMBH v. American Hoist & Derrick Co.</u>, 730 F.2d 1452, 221 USPQ 481 (Fed. Cir. 1984).

² In re Rijckaert, 9 F.3d 1531, 1534, 28 USPQ2d 1955, 1957 (Fed. Cir. 1993) (reversed rejection because inherency was based on what would result due to optimization of conditions, not what was necessarily present in the prior art); In re Oelrich. 666 F.2d 578, 581-82, 212 USPD 233, 236 CCPA 1981).

³ <u>Finnegan Corp. v. ITC</u>, 180 F.3d 1354, 51 USPQ2d 1001 (Fed. Cir. 1999); <u>In re Robertson</u>, 169 F.3d 743, 745, 49 USPQ2d 1949, 1950-51 (Fed. Cir. 1999); <u>Continental Can Co. USA v. Monsanto Co.</u>, 20 USPQ 2d 1746 (Fed. Cir. 1991); <u>Ex parte Levy</u>, 17 USPQ2d 1461 (BPAI 1990).

^{4 56} USPQ2d 1723, 1725 (BPAI 2000).

suggestion appears in the prior art); <u>In re Yates</u>, 663 F.2d 1054, 107, 211 USPQ 1149, 1151 (CCPA 1981).

The Examiner did not discharge that burden of indicating where such a teaching or suggestion appears in the prior art. The notion that communication interfaces, which communicate with different devices, must conform to effect communication is entirely inaccurate.

Even if the communication interfaces communicated with the same device, there is no requirement that these interfaces conform to one another. The common laptop can be communicated with using all of the following interfaces: USB, Bluetooth, wireless, IEEE 1394, and a network cable. These interfaces do not necessarily conform to one another, and therefore, the Examiner's assertion that "both sides of the server's communication interfaces must conform to effect communication" is completely inaccurate. Appellants recognize that the Examiner's statement <u>could</u> be true <u>if</u> both the first and second interfaces directly communicated with one another. However, such a limitation is <u>not</u> found in the claims. Thus, the Examiner has not established that the above-identified limitation is inherently disclosed by McHenry.

On page 8 of the Examiner's Answer, the Examiner also asserted the following:

McHenry's Figure 3 also shows Edge server 22, hosting Multi-Proxy requests and its associated multi-proxy agents 62 (i.e. Appellant's Data Access Middleware 180 and proxy 170) providing connectivity to origin servers residing on the Internet (i.e. Appellant's Back End DB 190).

As already noted above, claim 1 recites four different features: (i) universal database connectivity driver; (ii) database server; (iii) database proxy driver; and (iv) database driven application. However, based upon the Examiner's prior comments in the above-reproduced comments, the Examiner is relying upon edge server 22 to teach the claimed (i) universal

database connectivity driver; (iii) database proxy driver; and (iv) database driven application.

The Examiner's comments, however, are unclear as to what specific elements within the edge server 22 (i.e., multi-proxy agent 62, request/transfer server 64, cache policy manager 66, and rules base 68) correspond to these respective features.

Prior to addressing the Examiner's statement of the rejection, Appellants should not be required to guess as to what features the Examiner is relying upon in the statement of the rejection. However, despite repeated requests by Appellants for the Examiner to more clearly identify the features being relied upon in the statement of the rejection, the Examiner continues to frustrate Appellants' analysis of the Examiner's rejection by failing to meet the requirements of 37 C.F.R. § 1.104(c). Appellants, therefore, respectfully submit that the Examiner has failed to establish a prima facie case of anticipation within the meaning of 35 U.S.C. § 102 in rejecting claims 1-2, 4-7, 9-10, 13-14, and 16-17 based upon McHenry.

For the reasons set forth in the Appeal Brief of November 7, 2006, and for those set forth herein, Appellants respectfully solicit the Honorable Board to reverse the Examiner's rejection under 35 U.S.C. § 102.

To the extent necessary, a petition for an extension of time under 37 C.F.R. § 1.136 is

hereby made. Please charge any shortage in fees due in connection with the filing of this paper,

including extension of time fees, to Deposit Account 09-0461, and please credit any excess fees to

such deposit account,

Date: March 26, 2007 Respectfully submitted,

/Scott D. Paul/

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